## A. Antonietti

## Trails and Historical Ways in Switzerland

Switzerland is known internationally for its trails—especially in the High Alps. In recent years, however, Switzerland has come to pay close attention to its historic roads and trails, some dating back several thousand years—such as the route of Hannibal's March. Like the National Trails System of the United States—made up of both recreational and historic routes—Switzerland's current approach to trails offers several important lessons paralleling our own trail efforts.

The steep bare stone cut by the glaciers in the granite of the Aare has few lichens growing on it.As the rock was so slippery, steps had to be cut in it. Holes for posts were also made beside the path, which according to the "hospice order" of 1559 should have been used for constructing a railing.

n Switzerland, we differentiate between trails, footpaths, and historical trails. At the initiation of a group of citizens, a federal law regulating footpaths and trails was enacted in 1985, the Federal Law Relating to Footpaths and Trails or "FWG". It governs the planning, lay-out and maintenance of coherent networks of footpaths and trails. A key aim of this law is to make the community paths to the bus stop, to school, to shops and to the nearest park attractive. It instructs the cantons (Swiss equivalents to U.S. states) to develop effective plans for a trail system and to design, maintain, and register trails. The trails should be attractive and suitable for hikers, as well as safe and free to all users. The cantons can draw from the work of a 60 year-old private organization, Swiss Trails.

For the most part, the law is carried out by local governments which work closely with Swiss Trails. Although cooperation takes place with Swiss Trails, the government maintains authority over the trail system. Local units of government protect their trails by coordinating land-use planning. Then staying within the scope of regional and top-level state direct planning, local administrations and private groups consider trail protection when planning land-use.

In principle, **footpaths** (meaning those within housing projects and settled areas) are governed and handled the same as trails. The aim of the federal law concerning footpaths and trails is the same for footpaths—to make them attractive and to avoid unnecessary motor use. Where possible, historical footpaths are being integrated into the trails.

The designation and protection of **historic** trails occurs not under the FWG but rather under

the 1966 Federal Law Relating to the Protection of Nature and the Natural Heritage or NHG. Historical trails are considered cultural monuments and as



such are governed by the Swiss constitution article in the NHG which protects cultural monuments.

The Federal Office of Environment, Forests, and Landscape (FOEFL) has placed Professor Doctor Klaus Aerni from the University of Bonn's Geographical Institute in charge of the Swiss Historical Transportation Inventory (IVS). This national inventory defines national points of significance, classified as national, regional, or local according to their physical location and historical functions.

The inventory project began in 1983 and should end in 2003. At the moment, 2.5 million Swiss franks (equal to \$1.97 million U.S.) are annually available for the project. The inventory covers almost all of the historical transportation trails and roads across Switzerland. It is based on a passage of the NHG which states:

By the inclusion of an object of national importance in an inventory of the [Swiss] Confederation it is demonstrated that it deserves to a special degree undiminished preservation or, in any case, the utmost care. Deviation from undiminished preservation within the meaning of the inventories may only be considered in the fulfillment of a federal task if certain equivalent or overriding interests of similar national importance oppose it. (NHG Article 6)

The inventory of historic roads and paths seeks to document and evaluate the remnant traces of such transportation routes after two centuries of road building and modernization. It is built carefully on existing bibliographies, detailed mapping, field reconnaissance, and a database of related sites, with special attention paid to areas in conflict with other values (development, roads, etc.) The inventory also makes recommendations

about appropriate contemporary uses and protection strategies for each inventoried resource.

Non-profit and Volunteer Organizations

In the 1930s, Swiss Trails, a non-profit organization, began the construction of a marked trail system. Before the FWG came into effect, Swiss Trails, which has offices in the cantons as well as a main national office, had worked with authorities and had obtained financial support for a trail system with a government order that called for better securing and developing a trail system.

Swiss Trails, along with its many volunteer co-workers, carries the main burden for maintaining the trails. It is financed with member-dues, sponsorships, and public funds. The federal government supports the main office of Swiss Trails with 280,000 Swiss Franks (about \$220,000 U.S.) each year to run the office. They also lead hiking tours and actively market hiking to the public. The trails are of great tourist importance, securing the support of many local tourist organizations to expand the trail system.

Frequently, youth groups and apprentice groups organize work camps to construct and maintain the trails. Occasionally, part of the army or civil servants can be put to work on the trails.

As far as historical trails are concerned, a specific non-profit organization does not exist. However, historical trails have a close relationship with other trails because some can be used as part of the national trails system. The restoration of historical trails is similar to that of national

> trails—youth groups, civil servants, and nonprofits help maintain and construct them. Swiss tourist agencies have produced various brochures concerning the historical trails.

Private organizations such as Swiss Trails, the Swiss Habitat Protectors, or private-transportation organizations have a right of appeal against decrees issued by the cantons and federal authorities. Thus, they can require that decisions taken by the

lower authorities be reviewed by a higher authority up to the level of Federal Council and Federal Court. The environmental organizations make responsible use of this right and have a high success rate in their appeals.

Current Trail Use Patterns and Trends

Along with daily walks, day trips, and weekend trips, long trips are increasingly being organized and commercial ventures are being offered. A few trips have a hiking or trekking character while others have a historical aspect (mule or walking trips along historical paths of the Alpine pass). Hiking organizations are offering individual trips and guided trips for members. In addition, they are offering trips available to the public, which accept contributions rather than mandatory

Hiking suggestions are printed regularly in magazines and papers. For the last 10 years, we find virtually nothing but suggestions to attain a public means of transportation via the trail system. For hikers, the recommendation to abandon auto travel highlights environmentally friendly tourism.

Increasingly, volunteers are marking historical ways across Switzerland with special colors, consequently eliminating the need for the government to officially regulate trail marking. For example, historical (cultural) ways are marked with brown signs, hiking paths with yellow signs, mountain paths with red, and alpine hiking with blue. Specifically, the Jakobs Trail been marked with brown signs. This trail began in the Middle Ages at the times of the pilgrims who wandered across Europe converging on Santiago de Compostela in northern Spain. In addition, historic Alpine trails are being marked, such as those that began as horse and mule trails. A current project is the Simplon Ecomusuem which is being built at the historic pass between Valais and upper Italy where the old historic path is being restored.

Protecting Land and Sites Along Swiss Trails

Essentially, land is protected by land-use planning guides, many of which are interested in protecting trails. As a rule, the concern for natural preservation guides whether or not and where technical constructions such as highways, power lines, vacation-home development, and ski slopes are built. Under Article 3 of the NHG, the government shall issue building permits providing that the native landscape, historical sites, and cultural monuments are preserved. The acquisition of protected lands takes place only in exceptional cases and in small areas.

Sometimes trails go through private lands. Private owners can be reimbursed by the government if their income is reduced by trail activity or if the trail makes it difficult for a farmer or private owner to conduct business as usual. If they can

In this woodcut by Emil Rittmeyer (1860),a driver follows his two horses loaded with two side-packs. The animals are wearing muzzles and harness with a bell collar. Their shoes are fitted with wrought-iron calks in front and back to prevent slipping on rock and ice.



prove that this is the case, then the government should reimburse them.

Economic and Tourism Value of Swiss Trails

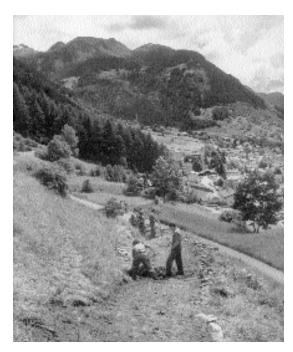
More than 30% of the Swiss population has indicated that hiking is a popular sport, which makes hiking a central theme of the Swiss tourist advertising. In the past year, advertising focused on announcing the Swiss historical trail system (Bekanntmachung historisher Wege.)

Hiking is of high importance to the Swiss economy. To date, however, direct proceeds from hiking have not been especially high. This does not mean, however, that future possibilities are ruled out. For example, the hiking industry may increase in economic importance since free time among the public is increasing. As city populations who are seeking natural enjoyment wander into the countryside on Sundays, they may or may not spend money in the rural areas. If they do not, rural areas will not benefit from the increase in hiking. However, many persons hike without backpack food supplies and, consequently, will stop in to eat at local restaurants along the trails. Since trails exist in relatively sparse areas, hikers that stop in to eat or make purchases in local restaurants and rural households can be of great importance to those local communities.

International Trail Connections

Non-governmental hiking organizations in the European Community have organized an international hiking union. They have plotted a European system of trails. However, the umbrella organization—Europische Wandervereinigung Eintrages Verein—does not have a source of funds and is thus confined to coordinating events and serving only as an information clearinghouse.

In recent times there has been a move to restore old bridle paths in Switzerland. Hikers over various Alpine passes can once more admire the old pathbuilding techniques.



The Inventory of Switzerland's Historical Transportation Routes of National Importance (IVS), which is being compiled by the Geographic Institute at the University of Bern, is well-received and is being partly imitated by other countries. Parts of the Swiss trails are historic Roman roads and trails. As a result, IVS has contacted other countries about them. The Council of Europe has initiated the "Jakobs Trail through Europe" program.

Major Problems Facing Swiss Trails

The major problem facing trails is the asphalting and distress of hikers due to the increase in motor vehicle traffic on the trails. Article 7 of the FWG states that trails should be replaced if much of the trail's surface is unsuitable for walkers. (The cantons regulate the procedures to close trails and decide which they are they obligated to replace in their respective areas). Since the trails have been altered by motor vehicle traffic so that they are no longer suitable for hikers, then it is important to find other means to open safe trails to hikers.

Hikers and motorists have not yet become used to sharing trails with one another, especially in the case of mountain bikes on narrow paths in the woods or in the mountains. We need measures to promote communication between the groups.

A few trails raise certain problems of conservation, such as damage to sensitive vegetation and disturbance of wildlife. In such cases, trails must be closed off or moved.

Historical trails can fall into disrepair if they are not being used a lot. Unfortunately, narrow passes are often growing in. Therefore, we are trying to integrate the historical trails into the rest of the trail system to guarantee their maintenance.

Because of trail decline, all of the canton and local governments must take measures and provide finances to remedy this problem.

Dr. A. Antonietti is the Vice Director of the Swiss Federal Office of the Environment, Forests, and Landscape (FOEFL).

This article is adapted from a letter from Dr. Antonietti to Steve Elkinton, dated September 15, 1994, translated by Crystal Fortwangler, along with a 1984 paper by Dr. K. Aerni and H. Schneider of the Geographic Institute of the University of Berne entitled "Old Roads and Trails—Significance and Preservation." Dr. Antonietti's address:

Vizedirektor Bundesamt fur Umwelt, Wald und Landschaft 3003 Bern Switzerland